



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 www.uspto.gov

BHJC HB/nH

APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/726,386	12/02/2003	1614	6106	✓2003080-0143 (SK-744-CON9	76	58	24

CONFIRMATION NO. 5603

24280
 Choate, Hall & Stewart
 Exchange Place
 53 State Street
 Boston, MA 02109

FILING RECEIPT



OC000000013794623

Date Mailed: 09/14/2004

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Samuel J. Danishefsky, Englewood, NJ;
 Peter Bertinato, Old Lyme, CT;
 Dai-Shi Su, New York, NY;
~~Dang Fang Meng, New York, NY;~~
 Ting-Chao Chou, Paramus, NJ;
 Ted Kamenecka, New York, NY;
 Erik J. Sorensen, San Diego, CA;
 Aaron Balog, New York, NY;
 Kenneth A. Savin, New York, NY;

Dongfang Meng, New York, NY

~~Power of Attorney:~~

~~GORDON D. CORLEIN-19165
 BERT J. LEWEN-19407
 MICHAEL JON SWEEDLER-19937
 PAUL FIELDS-20298
 WILLIAM F. DUDINE JR.-20569~~

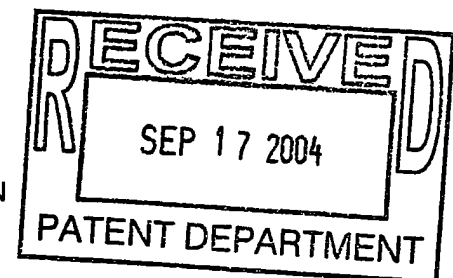
MARTIN E. GOLDSTEIN-20869
 Henry Sternberg-22408
 David Francescani-25159
 S. Peter Ludwig-25351
 Melvin Garner-26272

Domestic Priority data as claimed by applicant

This application is a CON of 10/431,467 05/07/2003 ABN

Foreign Applications

If Required, Foreign Filing License Granted: 09/13/2004



The number of your priority application, to be used for filing abroad under the Paris Convention is,
US10/726,386

Projected Publication Date: 12/23/2004

Non-Publication Request: No

Early Publication Request: No

Title

Synthesis of epothilones, intermediates thereto, analogues and uses thereof

Preliminary Class

514

**LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15**

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).



USPTO TO PROVIDE ELECTRONIC ACCESS TO CITED U.S. PATENT REFERENCES WITH OFFICE ACTIONS AND CEASE SUPPLYING PAPER COPIES

In support of its 21st Century Strategic Plan goal of increased patent e-Government, beginning in June 2004, the United States Patent and Trademark Office (Office or USPTO) will begin the phase-in of its E-Patent Reference program and hence will: (1) **provide downloading capability of the U.S. patents and U.S. patent application publications cited in Office actions** via the E-Patent Reference feature of the Office's Patent Application Information Retrieval (PAIR) system; and (2) **cease mailing paper copies of U.S. patents and U.S. patent application publications with Office actions** (in applications and during reexamination proceedings) except for citations made during the international stage of an international application under the Patent Cooperation Treaty (PCT). In order to use the new E-Patent Reference feature applicants must: (1) obtain a digital certificate and software from the Office; (2) obtain a customer number from the Office; and (3) properly associate patent applications with the customer number. Alternatively, copies of all U.S. patents and patent application publications can be accessed without a digital certificate from the USPTO web site, from the USPTO Office of Public Records, and from commercial sources. The Office will continue the practice of supplying paper copies of foreign patent documents and non-patent literature with Office actions. Paper copies of cited references will continue to be provided by the USPTO for international applications during the international stage.

Schedule

June 2004	TCs 1600, 1700, 2800 and 2900
July 2004	TCs 3600 and 3700
August 2004	TCs 2100 and 2600

All U.S. patents and U.S. patent application publications are available on the USPTO web site. However, a simple system for downloading the cited U.S. patents and patent application publications has been established for applicants, called the E-Patent Reference system. As E-Patent Reference and Private PAIR require participating applicants to have a customer number, retrieval software and a digital certificate, all applicants are strongly encouraged to contact the Patent Electronic Business Center to acquire these items. To be ready to use this system by June 1, 2004, contact the Patent EBC as soon as possible by phone at 866-217-9197 (toll-free), 703-305-3028 or 703-308-6845 or electronically via the Internet at ebc@uspto.gov.

Other Options

The E-Patent Reference function requires the applicant to use the secure Private PAIR system, which establishes confidential communications with the applicant. Applicants using this facility must receive a digital certificate, as described above. Other options for obtaining patents which do not require the digital certificate include the USPTO's free Patents on the Web program (<http://www.uspto.gov/patft/index.html>). The USPTO's Office of Public Records also supplies copies of patents for a fee (<http://ebiz1.uspto.gov/oems25p/index.html>). Commercial sources also provide U.S. patents and patent application publications.

For complete instructions see the Official Gazette Notice, USPTO TO PROVIDE ELECTRONIC ACCESS TO CITED U.S. PATENT REFERENCES WITH OFFICE ACTIONS AND CEASE SUPPLYING PAPER COPIES, on the USPTO web site.



IFW

ATTORNEY'S DOCKET NUMBER: 2003080-0143 (SK-744-CON9)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Danishefsky *et al.* Examiner: Not Yet Assigned
Serial No.: 10/726,386 Group Art Unit: 1614
Filed: December 2, 2003
For: *Synthesis of Epothilones, Intermediates Thereto, Analogues and Uses Thereof*

COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

TRANSMITTAL

Enclosed please find the following:

1. Petition to Correct Filing Receipt (2 pages);
2. Copy of Application Transmittal Letter (5 pages);
3. Copy of Notice Regarding Power of Attorney (1 page);
4. Marked-up copy of Filing Receipt (3 pages); and
5. Return Postcard.

Please charge any fees associated with this filing, or apply any credits, to our Deposit
Account No. 03-1721.

Respectfully submitted,

C. Hunter Baker, M.D., Ph.D.
Reg. No.: 46,533

CHOATE, HALL & STEWART
Exchange Place
53 State Street
Boston, MA 02109
(617) 248-5000
Dated: September 27, 2004

Certificate of Mailing

I certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

September 27, 2004
Date

Signature

Kenneth R. Maben

Typed or Printed Name of person signing certificate



CHOATE, HALL & STEWART

A PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS

EXCHANGE PLACE

53 STATE STREET

BOSTON, MASSACHUSETTS 02109-2804

TELEPHONE (617) 248-5000 • FAX (617) 248-4000

WWW.CHOATE.COM

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Express Mail No.: EV 314103476 US
Attorney's Docket No.: 2003080-0143 (SK-744-CON9)
Date Filed: December 2, 2003

UTILITY PATENT APPLICATION TRANSMITTAL
(FOR NEW NONPROVISIONAL APPLICATIONS UNDER 37 C.F.R. § 1.53(B))

Dear Sir:

Please find enclosed a patent application and papers as follows for:

Inventor(s):

<u>Given Name (first and middle)</u>	<u>Family Name or Surname</u>	<u>Residence (City and State or Foreign Country)</u>
Samuel J.	Danishefsky	Englewood, NJ
Peter	Bertino	Old Lyme, CT
Dai-Shi	Su	New York, NY
Dongfang	Meng	New York, NY
Ting-Chao	Chou	Paramus, NJ
Ted	Kamenecka	New York, NY
Erik J.	Sorensen	San Diego, CA
Aaron	Balog	New York, NY
Kenneth A.	Savin	New York, NY

Title of the Invention: **Synthesis of Epothilones, Intermediates Thereto, Analogues and Uses Thereof**

1) ☒ **Fee Transmittal Form** (original and duplicate submitted for fee processing)

2) ☐ **Applicant Claims Small Entity Status** (see 37 CFR § 1.27)

a) ☐ Statement Verifying Small Entity Status (optional)

3) ☒ **Specification**

TOTAL PAGES: 112

(87 pp. description; 24 pp. claims; 1 pg. abstract)

☒ Descriptive Title of the Invention

☒ Cross References to Related Applications (if applicable)

☒ Statement Regarding Federally Sponsored R & D (if applicable)

☐ Reference to sequence listing, a table, or a computer program listing appendix

☒ Background of the Invention

☒ Summary of the Invention

☒ Description of the Drawing (if filed)

☒ Detailed Description of the Invention

☒ Claim(s)

☒ Abstract of the Invention

4) ☒ **Drawing(s)** (35 U.S.C. § 113)

TOTAL SHEETS: 59

a) ☒ Formal Drawings (if checked)

TOTAL SHEETS: 76

5) ☒ **Oath or Declaration**

TOTAL PAGES: 10

a) ☐ Newly Executed (original or copy)

b) ☒ Copy from a prior application (37 C.F.R. § 1.63(d))-for
continuation/divisional application

i) ☐ Deletion of inventor(s): Signed Statement deleting inventor(s) named
in the prior application, see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).

c) ☐ Unexecuted

6) ☐ **Application Data Sheet**. See 37 C.F.R. § 1.76.

7) ☐ **CD-ROM or CD-R in duplicate, large table or Computer Program
(Appendix)**

8) ☐ **Nucleotide and/or Amino Acid Sequence Submission** (if applicable, all are necessary)

a) ☐ Computer Readable Form (CRF)

b) ☐ Specification Sequence Listing on:

i) ☐ CD-ROM or CD-R (2 copies); or

ii) ☐ Paper

c) ☐ Statements verifying identity of above copies

B) ACCOMPANYING APPLICATION PARTS:

9) ☒ **Assignment Papers** (cover sheet & document(s))

10) ☐ **37 C.F.R. § 3.73(b) Statement** (when there is an assignee)

11) ☒ **Power of Attorney**

12) ☐ **English Translation Document** (if applicable)

13) ☒ **Information Disclosure Statement (IDS)/PTO-1449 (5 pp. total)**

14) ☐ **Copies of IDS Citations**

15) ☒ **Preliminary Amendment (15 pp.)**

16) ☒ **Return Receipt Postcard (MPEP 503)** (specifically itemized)

17) ☐ **Certified Copy of Priority Document(s)** (if foreign priority is claimed)

18) ☒ **OTHER:** (if applicable, specified below)

Identification of Patent Under 37 CFR §1.607(c) (1 pg.)

C) FOR CONTINUING APPLICATIONS: (the appropriate box is checked, and certain information is provided below and in a preliminary amendment)

☒ continuation

☐ divisional

☐ continuation-in-part (CIP)

of prior application no.: 10/431,467

filed: May 7, 2003

examiner: T. Solola

group/art unit: 1626

FOR CONTINUATION OR DIVISIONAL APPLICATIONS ONLY: The entire disclosure of the prior application, from which an oath or declaration is supplied as detailed above, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference.

D.) PRIORITY CLAIM(S):

This application claims the benefit under 35 U.S.C. § 120 of any United States application(s) or PCT international application(s) designating the United States of America listed below:

<u>Application Serial No.</u>	<u>Filing date</u>	<u>Status (patented, pending, abandoned)</u>
08/986,025	December 3, 1997	Patented
09/691,615	October 18, 2000	Patented
09/662,426	September 13, 2000	Patented
09/686,158	October 11, 2000	Patented
09/808,451	March 31, 2001	Patented
09/874,514	June 5, 2001	Pending
10/004,571	December 4, 2001	Pending
10/058,695	January 28, 2002	Pending
10/374,805	February 25, 2003	Pending
10/431,467	May 7, 2003	Pending
10/695,582	October 28, 2003	Pending

This application claims the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

<u>Application Serial No.</u>	<u>Filing date</u>	<u>Status (pending, expired, abandoned)</u>
60/032,282	December 3, 1996	Expired
60/033,767	January 14, 1997	Expired
60/047,566	May 22, 1997	Expired
60/047,941	May 29, 1997	Expired
60/055,533	August 13, 1997	Expired

E) METHOD OF PAYMENT OF FILING FEES FOR THIS APPLICATION:

- ☐ Applicant claims small entity status 37 C.F.R. § 1.27.
- ☒ A check is enclosed to cover the filing fees.
- ☒ The commissioner is hereby authorized to charge filing fees or to credit any overpayment to deposit account number 03-1721.

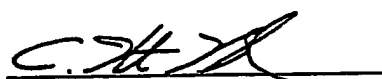
F) CORRESPONDENCE ADDRESS:

☒ Customer Number: 24280

☒ Correspondence Address:

Patent Department
Attn: C. Hunter Baker, M.D., Ph.D.
Choate, Hall & Stewart
53 State Street
Exchange Place
Boston, MA 02109
phone: (617) 248-5000
fax: (617) 248-4000

Respectfully Submitted,


C. Hunter Baker, M.D., Ph.D.
Reg. No.: 46,533

CHOATE, HALL & STEWART

53 State Street
Exchange Place
Boston, MA 02109

CERTIFICATE OF EXPRESS MAILING

"Express Mail" mailing label number EV 314103374 US; Date of Deposit: December 23, 2003

I hereby certify that this correspondence is being deposited with the United States Postal Service as "*Express Mail Post Office to Address*" service under 37 CFR 1.10 on the date indicated above and is addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

December 2, 2003

Date


Signature

Linda M. Amato

Typed or Printed Name of person signing certificate

Express Mail No.: EV 314103476 US
Date Filed: December 2, 2003